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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/916,232

07/25/2001

Candice Hellen Brown Elliott

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03/09/2004

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER  
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WASHINGTON, DC 20005

EXAMINER

LESPERANCE, JEAN E

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 03/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/916,232

Applicant(s)

BROWN ELLIOTT, CANDICE  
HELLEN

Examiner

Jean E Lesperance

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 July 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-86 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-22, 28-45 and 50-81 is/are allowed.
- 6) ☒ Claim(s) 23-27, 46-49 and 82-86 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>13, 14</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81. No new matter may be introduced in the required drawing.

### ***Information Disclosure Statement***

The information disclosure statement filed 3-25-2002, 10-1-2001, 10-11-2002, 3-6-2003, and 4-2-2003 fail to comply with 37 CFR 1.97(c) because it lacks a statement as specified in 37 CFR 1.97(e). It has been placed in the application file, but the information referred to therein has not been considered.

Claims 1-86 are presented for examination.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 23-27, 46-49, and 82-86 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent # 6,144,352 ("Matsuda et al.").

As to claims 23-27, 46-49, and 82-86, Matsuda et al. teach an arrangement of LEDs in each light emitting block of red color signal, green color signal, and blue color signal where the arrangement of Fig.2A (10) is consisting of two pixels, first pixel and second pixel. The arrangement can be divided into four different quadrants where the blue color is at the center of the quadrants disposed at the origin of an X and Y coordinates system forming a first, a second, a third, and fourth quadrant corresponding to providing a three-color pixel element comprising first and second pixel rows, each pixel row including three unit-area polygons, wherein an emitter occupies each said unit-area polygon, wherein a red emitter occupies a left unit-area polygon in said first pixel row and a green emitter occupies a right unit-area polygon in said first pixel row, wherein a green emitter occupies a left unit-area polygon in said second pixel row and a red emitter occupies a right unit-area polygon in said second pixel row, wherein a blue emitter occupies a center unit-area polygon in both said first and said second pixel rows, and wherein adjacent horizontal pairs of said three-color pixel elements are vertically offset from one another by one said pixel row; and driving said blue emitters, said red emitters, and said green emitters, wherein said blue emitters of said three-color pixel element is coupled to a pair of blue emitters of a next nearest neighboring three-color pixel element. The prior art does not explicitly teach a left and a right unit area polygon, a blue emitter square shaped, and L-shaped green and red emitters. The prior art teaches an arrangement of LEDs in each light emitting block of red color signal,

green color signal, and blue signal where the arrangement of Fig.2A (10) is consisting of two pixels, first pixel and second pixel.

Thus, It would have been obvious to a person of ordinary skill in the art to modify the arrangement of LEDs in each light emitting block of red color signal, green color signal, and blue signal where the arrangement of Fig.2A (10) to achieve the function of a left and a right unit area polygon, a blue emitter square shaped, and L-shaped green and red emitters because it would provide an LED display device includes an LED display section including a plurality of light emitting blocks arranged in a matrix, each light emitting block including at least a red LED, a green LED and a blue LED and it is also obvious a person of ordinary skill in the art to know if two devices can perform the same function their shape does not matter.

***Allowable Subject Matter***

Claims 1-22, 28-45, and 50-81 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: the claimed invention is directed to an array of display. Independent claims 1, 7, 28, and 50 identify a uniquely distinct feature "a pair of row lines associated with each said row position in said array, a first of said row lines coupled to said red emitters and to said green emitters in said row position disposed above said origin of said coordinate system in each of said three-color pixel elements and coupled to said blue emitters of every even pair of adjacent said three-color pixel elements in said row position, and a second of said row lines coupled to said red emitters and to said green emitters in said

row position disposed below said origin of said coordinate system in each of said three-color pixel elements, and coupled to said blue emitters of every odd pair of adjacent said three-color pixel elements in said row position; and three column lines associated with each said column position in said array, a first of said column lines coupled to said red emitters and to said green emitters in said column position disposed left of said origin of said rectangular coordinate system in each of said three-color pixel elements, a second of said column lines coupled to said blue emitter in said column position disposed at said origin of said rectangular coordinate system in each of said three-color pixel elements, and a third of said column lines coupled to said red emitters and to said green emitters in said column position disposed right of said origin of said rectangular coordinate system in each of said three-color pixel elements, wherein said second column line is coupled to said second column line of a next nearest neighboring said three-color pixel element". Independent claims 13, 18, 38, 59, 66, and 75 identify a uniquely distinct feature "first through tenth column line drivers coupled to said three-color pixel elements; a first column line coupled to said first column line driver, said first column line coupled to said first red emitter and said second green emitter of said first three-color pixel element; a second column line coupled to said second column line driver, said second column line coupled to said blue emitter of said first three-color pixel element and to an eighth column line coupled to said blue emitter of said third three-color pixel element; a third column line coupled to said third column line driver, said third column line coupled to said second red emitter and said first green emitter of said first three-color pixel element; a fourth column line coupled to said fourth column line driver,

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said fourth column line coupled to said first red emitter and said second green emitter of said second three-color pixel element; a fifth column line coupled to said fifth column line driver, said fifth column line coupled to said blue emitter of said second three-color pixel element and to an eleventh column line coupled to said blue emitter of said fourth three-color pixel element; a sixth column line coupled to said sixth column line driver, said sixth column line coupled to said second red emitter and said first green emitter of said second three-color pixel element; a seventh column line coupled to said seventh column line driver, said seventh column line coupled to said first red emitter and said second green emitter of said third three-color pixel element; a ninth column line coupled to said eighth column line driver, said ninth column line coupled to said second red emitter and said first green emitter of said fourth three-color pixel element; a tenth column line coupled to said ninth column line driver, said tenth column line coupled to said first red emitter and said second green emitter of said fourth three-color pixel element; and a twelfth column line coupled to said tenth column line driver, said tenth column line coupled to said second red emitter and said first green emitter of said fourth three-color pixel element". The closest art, Matsuda et al. as discussed above, either singularly or in combination, fails to anticipate or render the above limitations obvious.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (703) 308-6413. The examiner can normally be reached on from Monday to Friday between

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8:00AM and 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709 .

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

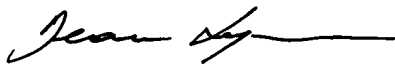
**or faxed to:**

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Jean Lesperance



Date 3-3-2004

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Lun-Yi Lao  
Primary Examiner

